STS-112 POST LAUNCH FILM REVIEW KSC Photo/Video Analysis Team 9 October 2002

ANOMALIES

None.

OBSERVATIONS

A stud hang-up occurred on HDP #3. The stud was held fully extended until the aft skirt foot was clear. Then the stud twanged briefly before falling into the holddown post. A piece of debris, possibly shaved aluminum from the bore fell with the stud, so broaching may be visible during the SRB Post Flight Assessment (scheduled for 10 October). (E-10)

The firing cable/line on HDP #6 did not break off at the SRB after T-0. Approximately three feet of the cable pulled out and flew with the SRB. (E-13)

SRB holddown post shoe rocked slightly on HDP's #2 and #6. (E-8, E-13)

GH2 vent line retraction appeared normal. (E-41, E-42, E-60, E-61)

No OMS pod flexing observed. (E-17, E-18)

Several tile surface chips were noted from base heat shield. This is a common occurrence due to SSME ignition acoustics.

Free-burning GH2 visible near vertical stabilizer during SSME ignition.

Several ice particles fell from ET/ORB umbilicals during SSME ignition.

Vapors on ET aft dome and SRB stiffener rings were observed after T-0.

Ice particles fell from LH2 / LO2 TSM T-0 disconnects.

Slight rebound of LH2 and LO2 TSM doors was observed. (E-2, E-3, E-19, E-20)

T-0 umbilical access platform on the inboard side of the LO2 and LH2 TSM moves slightly during SSME ignition. (E-17, E-18)

Small pieces of deck debris were blown across MLP deck during SSME and SRB ignition.

SRB throat plug, aft skirt instafoam pieces, and water trough material ejected from exhaust hole. No contact with vehicle.

NOTES

All high speed film items have been reviewed.

No anomalies were observed in the films and videos that would be a concern for re-entry and landing.

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